



Continuous functions on the plane regular after one blowing-up

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Résumé en anglais	We study rational functions admitting a continuous extension to the real affine space. First of all, we focus on the regularity of such functions exhibiting some nice properties of their partial derivatives. Afterwards, since these functions correspond to rational functions which become regular after some blowings-up, we work on the plane where it suffices to blow-up points and then we can count the number of stages of blowings-up necessary. In the latest parts of the paper, we investigate the ring of rational continuous functions on the plane regular after one stage of blowings-up. In particular, we prove a Positivstellensatz without denominator in this ring.
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